

On the Book "Gas Resources of the USSR"

S/009/60/000/004/004/004  
B027/B076

to natural gas and fuel oil. A few points in the book are not very clear, and the methods for the calculation of gas resources are insufficiently described; there are also various inaccuracies in the statistical material. The second part of the book highlights the most important geological characteristics of gas-bearing and gas-prospective areas which, however, are denoted too generally. Even though the opinion of the authors cannot always be shared, the book is nevertheless very good and up-to-date and is a valuable scientific contribution. ✓

Card 2/2

KOLYADNYY, S.N.

Analogues of the Kala series in Turkmenia. Trudy VNIGRI no.163:468-  
472 '60. (MIRA 14:6)  
(Turkmenistan--Petroleum geology)

KOLYADNYY, S.N.

Geologic history of western Turkmenia in the Akchagyl time.  
Trudy VNIGRI no.163:457-467 '60. (MIRA 14:6)  
(Turkmenistan—Geology)

KOLYADNYY, S.

"Gas resources of the U.S.S.R." by I.U.I. Bokserman and others.  
Reviewed by S. Koliadnyi. Geol. nefti i gaza vol. 4, no. 4:56, 3 of  
cover Ap '61. (MIRA 14:5)  
(Gas, Natural) (Borisov, A.A.) (Brod, I.O.) (Vasil'yev, V.G.)  
(Yelin, N.D.) (Yerofeyev, N.S.) (Kudryashova, N.M.)  
(L'vov, M.S.) (Mirchink, M.F.) (Muratova, A.T.)  
(Nevolin, N.V.) (Sokolov, V.L.) (Trofimuk, A.A.)

KOLYADNYY, S.N.

Faults of the Balkhan Depression. Sov.geol. 5 no.5:150-153 My '62.  
(MIRA 15:7)

1. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologorazvedochnyy  
institut.

(Balkhan Range region—Faults (Geology))

KOLYADNYY, S.N.

Practice in the overall study of conditions governing the formation  
of red beds in the Balkh n trough (Turkmenia). Trudy VNIGRI no.227  
Geokhim.sbor. no.9:263-312 '64. (MIRA 18:1)

KOLIADNYI, Z.

"New methods of prospecting and estimating gas field reserves"  
by V.P.Savchenko, A.L.Kozlov, N.V.Cherskii. Reviewed by Z.Koliadnyi.  
Gaz.prom. 5 no.11:53-54 N '60. (MIRA 13:11)  
(Geochemical prospecting) (Gas, Natural)  
(Savchenko, V.P.) (Kozlov, A.L.) (Cherskii, N.V.)

KOLYADYUK, I.V.

Transfusion of blood into the thoracic aorta. Khirurgiya no.3:32-35 Mr '55. (MLRA 8:7)

1. Iz fakul'tetskoy khirurgicheskoy kliniki II Moskovskogo meditsinskogo instituta imeni I.V.Stalina (dir.-chlen-korrespondent AMN SSSR prof. B.V.Petrovskiy i 2-y Gorodskoy bol'nitsy (Glavnyy vrach A.I.Khromova).

(AORTA,  
intra-aortal blood transfusion)  
(BLOOD TRANSFUSION,  
intra-aortal)



KOLYADYUK, I.V., kand. med. nauk (Moskva, Tushino, Podmoskovnaya ul. d.12-a, kv.17); DANIYEL'-BEK, K.V.

Clinical evaluation of regional chemotherapy by perfusion in sarcomas of the extremities. Ortop. travm. i protez. 26 no.6:25-30 Je '65. (MIRA 18:8)

1. Iz Onkologicheskogo instituta imeni Gertsena (dir.-prof. A.N. Novikov).

KOCHETKOVA, V.A.; KOLYADYUK, I.V.; GOLUBEVA, I.M.

Interaction of some antineoplastic chemotherapeutic preparations  
and antibiotics when used simultaneously in oncological treat-  
ment. Antibiotiki 8 no.7:650-655 J1'63. (MIRA 17:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy onkologicheskiy  
institut imeni P.A. Gertsena.

DANIYEL'-BEK, K.V., kand.med.nauk; KOLYADYUK, I.V., kand.med.nauk;  
NECHAYEV, Yu.B., kand.med.nauk; NOVIKOVA, L.L.

Methodology of regional chemotherapy of malignant neoplasms of  
the extremities by perfusion. Vest. khir. 93 no.12:49-52 D '64.  
(MIRA 18:5)

1. Iz Gosudarstvennogo onkologicheskogo instituta imeni Gertsena  
(dir. - prof. A.N.Nevikov), Moskva.

KOLYADYUK, I.V.; TALALAYEVA, A.V.; NEMYRYA, A.N.

Chemical and surgical treatment of gastric cancer. Khirurgiia 40  
no.8:8-17 Ag '64. (MIRA 18:3)

1. 3-ye khirurgicheskoye otdeleniye (zav. - doktor med. nauk A.P. Bazhenova) patologoanatomicheskogo otdeleniya (zav. - kand. med. nauk Z.V. Gol'bert) Onkologicheskogo instituta imeni Gertsena (dir. - prof. A.N. Novikov), Moskva.

NOVIKOV, A.N.; GARIN, N.D.; DANIYEL'-BEK, K.V.; KOLYADYUK, I.V.;  
LAVNIKOVA, G.A.; TRAKHTENBERG, A.Kh.; SHITKOV, K.G.

Chemotherapy of malignant tumors by the perfusion method.  
Khirurgiia 41 no.4:3-9 Ap '65. (MIRA 18:5)

1. Nauchno-issledovatel'skiy onkologicheskiy institut imeni  
Gertsena (dir. - prof. A.N. Novikov), Moskva.

BUSALOV, A.A.; KOLYADYUK, I.V.; MERATOVA, Kh.N.

Surgical treatment of coronary disease. Grud. khir. 1 no.5:3-9  
S-O '61. (MIRA 15:3)

1. Iz instituta grudnoy khirurgii AMN SSSR (dir. - prof.  
A.A. Busalov). Adres avtorov: Moskva, Leninskiy prosp., d.8,  
Institut grudnoy khirurgii AMN SSSR.  
(CORONARY HEART DISEASE)

TYURYAYEV, I.Ya.; KOLYADYUK, S.V.

Thermal decomposition of branched hexenes for the production of  
isoprene. Neftekhimiia 2 no.2:170-174 Mr-Apr '62. (MIRA 15:6)

1. Nauchno-issledovatel'skiy institut monomerov dlya sinteticheskogo  
kauchuka.

(Hexene)

(Isoprene)

S/204/62/002/002/003/007  
I060/I242

AUTHORS: Tyuryayev, I.Ya. and Kolyadyuk, S.V.

TITLE: Thermal decomposition of branched hexanes for isoprene production

PERIODICAL: Neftkhimiya, v.2, no.2, 1962, 170-174

TEXT: The paper reports on the influence of structure of branched hexanes on the direction of their decomposition. This direction depends on whether decomposition takes place in the presence of a catalyst or not. The production of isoprene by thermal cracking according to USA patent 2404056 of July 16, 1946, and British patent 831249, March 23, 1960 is discussed. The decomposition of 2-methylpentane-2 at 750° with contact time of 0.09 sec and dilution in the proportion of iso-C<sub>6</sub>H<sub>12</sub> : N<sub>2</sub> = 1:3 was investigated by Nazarov, Klabunovskiy and Kravchenko. The main products of decomposition were: metha-

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S/204/62/002/002/003/007  
I060/I242

Thermal decomposition...

ne 30-40%, ethylene 10-15%, propylene 5-8% and isoprene 30-40%. Addition of HBr facilitates the decomposition of hydrocarbons at the C-C link in the  $\beta$ -position to the double bond and increases the output of isoprene. This agrees with the theoretical notion that this is the weakest link. There are 2 figures and 2 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut monomero-  
v dlya sinteticheskogo kauchuka (Scientific Research  
Institute of Monomers for Synthetic Rubber)

SUBMITTED: January 22, 1962

Card 2/2

KOLYAGIN, Yu.M. (selo Lenino, Moskovskaya oblast')

Functional equations. Mat. v shkole no.5:4-8 S-0 '59.

(MIRA 13:2)

(Functional equations)

KOLYAGIN, Yu.M.

Greater emphasis on theory in teaching arithmetic in secondary  
schools. Uch. zap. MOPI 123:209-226 '63. (MIRA 17:4)

KOLYAGIN, Yu.M.

French arithmetic textbooks for secondary schools. Uch. zap.  
MOPI 123:297-333 '63. (MIRA 17:4)

KOLYAGIN, Yu.M. (Moskva)

"Collection of arithmetic problems for normal schools" by A. F.  
Chekmarev, S.V.Filichev. Reviewed by IU.M.Koliagin. Mat. v shkole  
no.1:78-79 Ja-F '63. (MIRA 16:6)  
(Arithmetic--Problems, exercises, etc.)  
(Chekmarev, A.F.) (Filichev, S.V.)

KOLYAGIN, Yu.M. (Lenino, Moskovskoy oblasti)

Generalization of periodicity and some of its applications. Mat v  
shkole no.5:56-60 S-0 '60. (MIRA 13:10)  
(Functional equations)

KOLYAGIN, Yu. M. (Moscow)

Some results from the experimental studies on the reorganization of teaching mathematics in the 4th and 5th grades in Soviet schools. Mat 1 fiz Bulg 8 no.1:53-40 Ja-F '65.

ISTOMIN, V.I.; KOLYAGINA, A.A.

Moisture meters. Bum.1 der.prom. no.4:61-62 O-D '62.

(MIRA 15:12)

(Moisture—Measurement)



CA 15

PROCESSING AND PROPERTY INDEX

The genesis and geography of the forest steppe soils of the Ob plateau, Western Siberia. S. A. Kalyagin. *Podology* (U. S. S. R.) 1940, No. 11, 31-40. — Agrochem. data on different types of chernozem and salinized soils, in all 25 profiles, are presented in a series of tables. It is brought out that with the increase in the process of degradation of chernozem the cation-exchange capacity increases. There is no correlation between the state of cultivation—age of land in cultivated crops—of the soil and such indexes as H satn., hydrolytic acidity, cation-exchange capacity. The more degraded the soil the less available  $P_2O_5$  is found in fields of sugar beets treated earlier with acid phosphate. J. S. Joffe

ASD.SLA METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1. KOLYAGO, S. A.
2. USSR (600)
4. Vil'iams, Vasilii Robertovich, 1862-1939.
7. Development of Academician V. R. Vil'iams' doctrine on a single process of soil-formation. Pochvovedenie No. 4, 1953.

9. Monthly List of Russian Accessions. Library of Congress, April 1953. Unclassified.

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,  
p 45 (USSR) 14-57-7-14548

AUTHOR: Kolyago, S. A.

TITLE: Quaternary Deposits on the Right Bank of the Minusinsk Valley (Chetvertichnyye otlozheniya pravoberezhnoy chasti Minusinskoy vpadiny)

PERIODICAL: Tr. Tomskogo un-ta, 1956, Vol 133, pp 171-178

ABSTRACT: Five geomorphological regions are distinguished on the right bank of the valley: the Minusinsk depression, the Sydinskaya-Yerbinskaya depression, the foremountain part of the Chulym-Yenisei depression on the right bank of the Yenisei River, the eastern foremountain borderland of the Minusinsk depression where extrusive bedrock predominates, and the eastern foremountain borderland of the Minusinsk valley where intrusive bedrock predominates. The modern relief and

Card 1/2

Quaternary Deposits on the Right Bank (Cont.)

14-57-7-14548

Quaternary deposits of these regions exhibit a unique geological structure. The deposits are represented by two genetic types of unconsolidated formations, lacustrine and fluvial sands (on the bottom of the depression), and loess cover. The lacustrine and fluvial sands outcrop in some parts of the bottom surface in a narrow strip of uplifted and heavily eroded territory on the right bank of the Yenisei from Minusinsk to the Anashskiy pine forest. There they are subject to the eolian action; this action formed dunes and mounds which are stabilized by the pine forests.

Card 2/2

G. K.

KOLIAGO, S.A.

Scientific work of the Soil Science Department of the Tomsk State  
University. Pochvovedenie no.6:119-123 Ja '57. (MLRA 10:9)

1. Tomskiy gosudarstvennyy universitet, kafedra pochvovedeniya.  
(Tomsk--Soil research)

KOLYAGO, S.A.

Conditions for soil formation and the undivisible nature of soil  
formation; fundamentals of paleopedology. Report No. 1. Izv. Sib.  
otd. AN SSSR no.2:123-128 '58. (MIRA 11:9)

1. Tomskiy gosudarstvennyy universitet.  
(Soil formation)

KOLYAGO, S.A.

Conditions for the process of soil formation and its indivisible nature; fundamentals of paleopedology. Izv. Sib. otd. AN SSSR no.5: 101-109 '58. (MIRA 11:9)

1.Tomskiy gosudarstvennyy universitet im. V.V. Kuybysheva.  
(Soil formation)

KOLYAGO, S.A.

Work of the Tomsk Branch of the All-Union Society of Soil  
Scientists. Pochvovedenie no.11:100 N '58. (MIRA 11:12)  
(Siberia--Soil research)



KOLYAGO, S.A.

25

Systematics and development of genetic series of soils.  
Izv. Sib. otd. AN SSSR no.3:124-132 '59. (MIRA 12:8)

1. Tomskiy gosudarstvennyy universitet im. V.V. Kuybysheva.  
(Soils--Classification)

KOLYAGO, S.A.

Use of pedological and geographical material in determining the course of agricultural expansion and the correlation of the principal branches of agriculture. Izv. Sib. otd. AN SSSR no.6: 101-105 '59. (MIRA 12:12)

1. Tomskiy gosudarstvennyy universitet.  
(Minusinsk Lowland--Agriculture)

KOLYAGO, S.A.

Paleogeographic analysis of data on the history of economic  
conditions in the Minusinsk Lowland. Izv. Sib. otd. AN SSSR  
no.7:76-88 '59. (MIRA 12:12)

1.Tomskiy gosudarstvennyy universitet.  
(Minusinsk Lowland--Economic geography)

KOLYAGO, S.A.

Genetic features of "Brown forest" soils of Siberia. Izv. Sib. otd.  
AN SSSR no.8:113-114 '59. (MIRA 13:2)

1. Tomskiy gosudarstvennyy universitet.  
(Siberia--Forest soils)

KOLYAGO, S.A., kand. geol.-miner. nauk, otv. red.

[Studies on the geography and genesis of the soils of  
central Siberia] Ocherki po geografii i genezisu pochv  
Srednei Sibiri. Moskva, Izd-vo "Nauka," 1964. 165 p.  
(MIRA 18:1)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut  
geografii Sibiri i Dal'nego Vostoka.

KOLYAGO, S.A.; KUZ'MIN, V.A.

Problems of soil geography at the Eight International Congress of  
Soil Scientists in Bucharest. Dokl. Inst. geog. Sib. i Dal'. Vost.  
no.7:85-90 '64. (MIRA 18:10)

Kolyako, Dmitriy Akimovich

GBYKO, Ivan Terent'yevich; KOVALENKO, Aleksey Yakovlevich; KOLYAKO, Dmitriy Akimovich; AZAMAT, G.N., red.; KHLOBORDOV, V.I., ~~chern. red.~~

[Krasnodar Territory: facts and figures] Krasnodarskii krai; tsifry i fakty. [Krasnodarsk] Krasnodarskoe knizhnoe izd-vo, 1957. 122 p.  
(MIRA 11:2)

(Krasnodar Territory--Economic conditions)

SKLYAR, V.A.; AVRAMENKO, K.P.; PAVLOV, D.F.; BOBKOV, N.V.; BERESTOVAYA, R.V.;  
SEKRYPHIK, Ye.P.; SEMONENKO, Ye.T.; SERGEYEVA, V.P.; KOLYAKO, D.A.,  
red.; SOLDATOVA, N.P., otvetstv.za vypusk; GRISHNYAYEV, B.G.,  
tekhn.red.

[Economy of Krasnodar Territory; a statistical manual] Narodnoe  
khoziaistvo Krasnodarskogo kraia; statisticheskii sbornik.  
Krasnodar, Gosstatizdat, 1958. 233 p. (MIRA 12:2)

1. Krasnodarskiy kray. Statisticheskoye upravleniye. 2. Nachal'nik  
Krasnodarskogo krayevogo statisticheskogo upravleniya (for Kolyako).  
(Krasnodar Territory--Statistics)



BUKHARIN, Yevgeniy Mikhaylovich; KOLIYAKOV, Ayzik Mordkovich;  
KURNOSOV, Aleksey Ivanovich; LYALIN, Feliks Isayevich;  
TROFIMOV, Viktor Ivanovich; LEVIN, L.E., red.

[Designing structures for electric transmission lines  
using the method of limiting states] Proektirovanie  
stroitel'nykh konstruktsii linii elektroperedachi po  
predel'nyy sostoianiiam. Pod red.E.M.Bukharina. Moskva,  
Energia, 1965. 111 p.  
(MIRA 18:11)

KOLYAKOV, M.I.

Unit for water stabilization by means of exhaust gases. Khim.prom.  
[Ukr.] no.2:58-60 Ap-Je '65. (MIRA 18:6)

KORZHEVENKO, G.N., kand. veter. nauk, KOLYAKOV, V.I., kand. veter. nauk;  
GORSHKOV, Yu.I., kand. biolog. nauk

Hydroperoxide reaction in the determination of phosphorus organic  
compounds in water and feeds. Veterinarika 42 no.5:76-77 My '65.  
(MIRA 18:6)

KOLYAKOV, YA. YE.

KOLYAKOV, YA. YE. (Professor) 30-years of Soviet Veterinary microbiology.

So: Veterinariya; 24; 11; November 1947; Uncl.

TABCON

KOLYAKOV, YA. YE., Prof

F<sup>1</sup> 31/49T65

USSR/Medicine - Epizootic Diseases,  
Prevention  
Medicine - Animals

Jun 48

"The Principle of Slaughtering in Controlling  
Infectious Diseases in Farm Animals," Prof Ya. Ye.  
Kolyakov, Dr Vet Sci, 3 $\frac{1}{4}$  pp

"Veterinariya" <sup>245</sup>/No 6

Discusses recent article by Acad K. I. Skryabin  
on this subject.

31/49T65

KOLYAKOV, Ya. Ya., Merited Worker of Sci. of RSFSR, Prof., Dr. of Vet. Sci.)  
Prof. M. K. Iuskovets -  
"Tuberculosis of domestic animals and the methods of the fight  
against it." Sel'khozgiz, Moskva, 1948. (Reviewedd by Ia. E. Kolyakov)  
SO: Vet. 26 (11) 1949, p. 59

KOLYAKOV, Ya. ~~AAA~~ PINUS, A., SHAPIRO, A.

Infectious Anemia, by Ya. KOLYAKOV, A. PINUS, A. SHAPIRO. Russian Book.  
(Veterinarnyy Entsiklopedicheskiy Slovar, Vol. 1, 1950; pp386-393)  
SO: ~~SECRET~~ CTS:# 57; 28 Jul 1954; ~~SECRET~~ deg

KOLYAKOV, IA. E.

Veterinarnaia mikrobiologii [Veterinary microbiology]. Moskva,  
Sel'khozgiz, 1952. 487 p.

SO: Monthly List of Russian Accessions, Vol. 7 No. 2 May 1954.



SHULYAK, F.S.; KOLYAKOV, Ya.Ye., professor, zaslushennyy deyatel' nauki RSFSR, zaveduyushchiy.

Effect of bile upon certain types of pathogenic microbes; author's abstract. Zhur.mikrobiol.epid.i immun. no.2:69-70 F '53. (MLRA 6:5)

1. Kafedra mikrobiologii, (Bacteria, Pathogenic) (Bile)

KOLYAKOV, Ya. Ye.

ORLOV, F.M., dotsent, kandidat veterinarnykh nauk, redaktor; SOLOVEY, A.S., redaktor; AFONSKIY, S.I., zaslushennyy deyatel' nauki Tatarskoy ASSR, professor, doktor veterinarnykh nauk, redaktor; IVANOV, M.M., laureat Stalinskoy premii, doktor veterinarnykh nauk, redaktor; KOVALENKO, Ya.R., professor, doktor veterinarnykh nauk, redaktor; KOLYAKOV, Ya.Ye., zaslushennyy deyatel' nauki RSFSR, professor, doktor veterinarnykh nauk, redaktor; METELKIN, A.I., professor, doktor biologicheskikh nauk, redaktor; SARKISOV, A.Kh., professor, doktor biologicheskikh nauk, redaktor; SVINTSOV, P.M., professor, doktor veterinarnykh nauk, redaktor; BALLOD, A.I., tekhnicheskiy redaktor

[Laboratory research methods in veterinary medicine] Laboratornye metody issledovaniya v veterinarii. Moskva, Gos. izd-vo selkhoz. lit-ry. Vol. 3. 1954. 645 p.  
(Veterinary research) (MIRA 7:10)

KOLYAKOV, Ye. Ye., zaslushennyy deyatel' nauki, professor, doktor veterinarnykh nauk.

The role of Kharkov Veterinary Institute in the development of micro-  
in Russia. Sbor. trud. Khar'. vet. inst. 22:29-38 '54. (MIRA 9:12)

1. Kafedra mikrobiologii Moskovskoy veterinarnoy akademii.  
(Kharkov--Veterinary colleges) (Microbiology--history)

KOLYAKOV, Ya. Ye.

BENEDIKTOV, I.A., redaktor; GRITSSENKO, A.V., redaktor; IL'IN, M.A., zamestitel' glavnogo redaktora, LAPTEV, I.D., LISKUN, Ye.F.; LOBANOV, P.P., glavnyy redaktor; LYSENKO, T.D.; SKRYABIN, K.I.; STOLETOV, V.H.; PAVLOV, G.I., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SOKOLOV, N.S., professor, nauchnyy redaktor; ANTIPOV-KARATAYEV, I.N., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KARPINSKIY, N.P., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SHESTAKOV, A.G., doktor sel'skokhozyaystvennykh nauk, professor, nauchnyy redaktor; RUBIN, B.A., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KOMARNITSKIY, N.A., dotsent, nauchnyy redaktor; LYSENKO, T.D., akademik, nauchnyy redaktor; POLYAKOV, I.M., professor, nauchnyy redaktor; SHCHEGOLEV, V.H., doktor sel'skokhozyaystvennykh nauk, professor, nauchnyy redaktor; YAKUSHKIN, I.V., akademik, nauchnyy redaktor; LARIN, I.V., professor, doktor biologicheskikh nauk, nauchnyy redaktor; SMELOV, S.P., professor, doktor biologicheskikh nauk, nauchnyy redaktor; MEL'SHTEYN, V.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SHCHERBACHEV, D.M., professor, doktor meditsinskikh nauk, nauchnyy redaktor; OGOLEVETS, G.S., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; YAKOVLEV, P.H., akademik, nauchnyy redaktor; YEKIMOV, V.P., agronom, nauchnyy redaktor [deceased], EYTINGEN, G.P., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; TIMOFEEV, N.N., professor, nauchnyy redaktor; TUROV, S.I., professor, doktor biologicheskikh nauk; YUDIN, V.M., akademik, nauchnyy redaktor; LISKUN, Ye.F., akademik, nauchnyy redaktor; VITT, V.O., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KALININ, V.I., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor.

(Continued on next card)

BENEDIKTOV, I.A.--- (continued) Card 2.

GRABEN', L.K., akademik, nauchnyy redaktor; NIKOLAYEV, A.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; RED'KIN, A.P., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SMETNEV, S.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; POPOV, I.S., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; MANTSEYFEL', P.A., professor nauchnyy redaktor; INIKHOV, G.S., professor, doktor khimicheskikh nauk, nauchnyy redaktor; ANFIMOV, A.N., professor, nauchnyy redaktor; GUBIN, A.F., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; POLTEV, V.I., professor, doktor veterinarnykh nauk, nauchnyy redaktor; LINDE, V.V., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; CHERGAS, B.I., professor, doktor biologicheskikh nauk, nauchnyy redaktor; NIKOL'SKIY, G.V., professor, nauchnyy redaktor; AVTOKRATOV, D.M., professor, doktor veterinarnykh nauk, nauchnyy redaktor; IVANOV, S.V., professor, doktor biologicheskikh nauk, nauchnyy redaktor; VIKTOROV, K.P., professor, doktor veterinarnykh nauk, nauchnyy redaktor; KOLYAKOV, Ya.Ya., professor, doktor veterinarnykh nauk, nauchnyy redaktor; ANTIFIN, D.N., professor, doktor veterinarnykh nauk, nauchnyy redaktor; MARKOV, A.A., professor, doktor veterinarnykh nauk, nauchnyy redaktor; DOMRACHEV, G.V., professor, doktor veterinarnykh nauk, nauchnyy redaktor; OLIVKOV, B.M., professor, doktor veterinarnykh nauk, nauchnyy redaktor [deceased]; FLEGMATOV, N.A., professor, doktor veterinarnykh nauk, nauchnyy redaktor; BOLTINSKIY, V.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; VIL'YAMS, V.I.P., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; KRASNOV, V.S., kandidat tekhnicheskikh nauk, nauchnyy redaktor;

(Continued on next card)

BENEDIKTOV, I.A.---(continued) Card 3.

YEVREINOV, M.G., akademik, nauchnyy redaktor; SAZONOV, N.A., doktor tekhnicheskikh nauk, nauchnyy redaktor; NIKANDROV, B.I., inzhener, nauchnyy redaktor; KOSTYAKOV, A.N., akademik, nauchnyy redaktor; CHERKASOV, A.A., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; DAVITAYA, P.P., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; IVANOV, N.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; ORLOV, P.M., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; LOZA, O.M., kandidat ekonomicheskikh nauk, nauchnyy redaktor; CHERNOV, A.V., kontrol'nyy redaktor; ZAVARSKIY, A.I., redaktor; ROS-SOSHANSKAYA, V.A., redaktor; FILATOVA, N.I., redaktor; YEMEL'YANOVA, N.I., redaktor; SILIN, V.S., redaktor BRANZBURG, A.Yu., redaktor; MAGNITSKIY, A.V., redaktor terminov; KUDRYAVTSEVA, A.G., redaktor terminov; AKSENOVA, A.P., mladshiy redaktor; MALYAVSKAYA, O.A., mladshiy redaktor; PEDOTOVA, A.F., tekhnicheskiiy redaktor

(Continued on next card)

BENEDIKTOV, I.A.---(continued) Card 4.

[Agricultural encyclopedia] Sel'skokhoziaistvennaia entsiklopediia.  
Izd.3-e, perer. Moskva, Gos. izd-vo selkhoz. lit-ry. Vol.5. [T-IA.]  
1956. 663 p. (MIRA 9:9)  
(Agriculture--Dictionaries and encyclopedias)

USSR / Human and Animal Morphology (Normal and Patho- S-3  
logical). Digestive System.

Abs Jour: Ref Zhur-Biol., No 17, 1958, 79044.

Author : Kolyakov, Ya. Ye., Pichugin, L. M.

Inst : Not given.

Title : Changes of a Type of Horse IBM Experimentally  
Induced in the Liver of Laboratory Animals.

Orig Pub: Tr. Mosk. vet. akad., 1956, 12, 192-206.

Abstract: In tests on rabbits, guinea pigs and mice, it was shown that during the inoculation with Bac. perfringens, Vibrion septique, Bac. chauvoei and Bac. oedematiens in the liver of rabbits, there occurred in the animals that perished dystrophic changes with degenerative obesity, granular degeneration of the liver cells, disorganization of the supporting struc-

Card 1/2

12

USSR / Human and Animal Morphology (Normal and Patho- S-3  
logical). Digestive System. APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000824010020-4"

Abs Jour: Ref Zhur-Biol., No 17, 1958, 79044.

Abstract: ture, and cellular infiltration. These changes are also obtained with the intervenous introduction of the toxin Bac. perfringens, of fatty acid, and, in lesser degree, of bile. Analogous changes are observed in horses infected with encephalomyelitis.

Card 2/2



KOLYAKOV, Ya. Ya., Professor, zaslushennyi deyatel' nauki RSFSR.

Basic principles and tasks in using antibiotics in veterinary medicine.  
Veterinariia 34 no.5:58-64 My '57. (MIRA 10:6)  
(Antibiotics) (Veterinary medicine)

*Kolyak Ya. Ye.*

KOLYAKOV, Ya.Ye., prof., zasluzhennyy deyatel' nauki RSFSR

Forty years of veterinary microbiology in the U.S.S.R.  
Veterinariia 34 no.11:40-51 N '57.

(MIRA 11:1)

1. Moskovskaya veterinarnaya akademiya.  
(Veterinary bacteriology)

*KOLYAKOV YA. YE.*

ALICHKIN, S.L.; AGRINSKIY, N.I.; ANDREYEV, G.F.; BAKUMENKO, G.D.;  
VORONTSOV, S.M.; VOYSTRICKOV, I.V.; GRADYUSHKO, G.M.; ZYKOV, A.V.  
IVANOVTSSEV, P.V.; KINBURG, M.Ya.; KOVALEV, P.A.; KOZLOVSKIY, Ye.V.  
KORNIYENKO, A.P.; ~~KOLYAKOV, Ya.Ye.~~; LAKTIONOV, A.M.; LEVADNYY, B.A.  
MEDVEDEV, I.D.; NOVIKOV, N.V.; ORLOV, F.M.; OSTROVSKIY, A.A.;  
ORTSEV, V.P.; PENIONZHKO, A.M.; POLOZ, D.D.; PRITULIN, P.I.;  
PETUKHOVSKIY, A.A.; ROGALEV, G.T.; RYBAK, P.Ya.; SUTYAGIN, G.P.  
TUKOV, R.A.; KHAVCHENKO, D.F.; CHERNETSKIY, T.I.; SHPAYER, N.M.  
SHUSTOVSKIY, F.A.

Nikolai Vasil'evich Spesivtsev. Veterinariia 35 no.2:96 F '58.  
(MIRA 11:2)  
(Spesivtsev, Nikolai Vasil'evich, 1901-1957)

KOLYAKOV, Ya.Ye., prof., zaslužennyy deyatel' nauki RSFSR

Main stages in the development of a study of glanders. Veterinariia  
36 no.7:84-88 J1 '59. (MIRA 12:10)

1. Moskovskaya veterinarnaya akademiya.  
(Glanders)

KOLYAKOV, Yakov Yefremovich, prof., sasluzhennyy deyatel' nauki RSFSR;  
YEMEL'YANOVA, N.I., red.; PEVZNER, V.I., tekhn.red.

[Veterinary microbiology] Veterinarnaya mikrobiologiya. Izd.2.,  
dop. i ispr. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 409 p.  
(MIRA 14:2)

1. Moskovskaya veterinarnaya akademiya (for Kolyakov).  
(Veterinary bacteriology)

KOLYAKOV, Ya. ~~Ye.~~ and MELIKHOV, A. D.

"Expressdiagnostics of the anthrax microbe in water."

Veterinariya Vol. 37, No. 3, 1960, p. 81

Kolyakov, Prof. Honored <sup>Scientific</sup> worker RSFSR. Moscow Vet. Acad.

KOLYAKOV, Ya.Ye., zasluzhennyy deyatel' nauk RSFSR, prof.; MELIKHOV, A.D.,  
kand.veter. nauk

Rapid diagnosis of the anthrax microbe in water. Veterinariia 37  
no.3:81-84 Mr '60. (MIRA 16:6)

1. Moskovskaya veterinarnaya akademiya.  
(Anthrax)

KOLYAKOV, Yakov Yefremovich, zasl. deyatel' nauki RSFSR, prof.;  
DREVLYANSKAYA, N.I., red.

[Veterinary microbiology] Veterinarnaya mikrobiologiya.  
Izd.3., dop. i ispr. Moskva, Kolos, 1965. 431 p.  
(MIRA 18:6)

1. Moskovskaya veterinarnaya akademiya (for Kolyakov).



GUSEV, A.A., aspirant; KOLYAKOV, Ya.Ye., prof., nauchnyy rukovoditel'  
raboty

Lactic acid urease-active micrococci of the rumen in cattle.  
Veterinariia 41 no.9:24-26 S '64. (MIRA 18:4)

1. Moskovskaya veterinarnaya akademiya.

GUSEV, A.A., aspirant; KOLYAKOV, Ya.Ye., nauchnyy rukovoditel' raboty  
prof.

Urea-decomposing bacteria in silage. Veterinariia 41 no.11;  
89-91 N '64. (MIRA 18:11)

1. Moskovskaya veterinarnaya akademiya (for Gusev).

KOLYNNOV, YA. YE.  
LONTSKY, YA. YE. PROF

PM 246716

USSR/Medicine, Veterinary - Bacterial      Feb 53  
Nutrient Media,  
Vaccines

"The Action of Bile on Some Species of Pathogenic Bacteria," P.S. Shulyak, Chair of Microbiology, Head Prof Ya.Ye. Kolyakov

"Zhur Mikrobiol, Epidemiol, i Immunobiol" No 2, pp 69, 70

Bile has a pronounced bacteriostatic effect on anthrax vaccine strains and soil aerobes; a weaker effect on B. avisepticum, B. rhustopathiae suis, staphylococci; none on B. paratyphi abortus equi, B. coli, etc. The effect of bile on Tschenkelsky vaccine and SFT anthrax strains was enhanced by pancreatin. A medium for differentiating between B. anthracis and pseudanthrax soil aerobes was developed. By modifying B. rhustopathiae suis with bile, the KM (Chair of Microbiology) vaccine was developed. The KM vaccine effectively immunizes pigeons against avian erysipelas, a disease to which they are otherwise very susceptible.

246716

<p><i>KOLYAKOVA, G. A.</i></p> <p><i>17</i></p>	
<p>Rapid determination of alcohol in tinctures. G. K. Kolyakova. <i>Med. Prom. S.S.S.R.</i> 1949, No. 2, 21-3. Detn. of <math>n</math> and <math>d</math> is used. The concn. of EtOH is taken from the equation: <math>X = 1000/P + 360C</math>, where <math>X</math> is alc. concn. in vol. %, <math>P</math> is the difference between <math>n</math> of the tincture and that of <math>H_2O</math> (1.33343), and <math>C</math> is the difference between <math>d</math> of water and that of tincture. Agreement within 1% is obtained on various medicinal tinctures. G. M. Kozlovskii</p>	
<p>Central Sci-Res. Pharmaceutical Inst</p>	
<p>ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>	
<p>COMMON ELEMENTS</p>	
<p>COMMON SYMBOLS</p>	

29

*ca*

**The electric charge of the vegetable tans.** S. I. Sokolov and G. R. Kolyakova. *Tsentral. Nauch.-Issledovatel. Inst. Kozhvennoi Prom., Sbornik Rabot No. 6, 114-M (1934).*—Conductometric and potentiometric titrations of spruce and oak exts. indicate that the colloidal complex, after purification by means of dialysis and electrodialysis, acquires an acidic character with stepwise dissociation. The equivalents found were for oak ext. 1700 and for spruce ext. 1000. After the neutralization of the first stage of dissociation, which should be ascribed to the carboxylic group, a further fixation of the alkali takes place, accompanied by a high degree of hydrolysis, probably from the phenolic groups, of the salt-like compd. The electrokinetic charges of spruce and oak exts., purified by means of dialysis or electrodialysis, are 106.3 and 93.4 mv., resp. The charge approaches zero in all cases when acids are added, and a recharge of the particles does not take place. Increase of the temp. increases the cataphoretic movement of the tans. The elec. charges of unpurified natural exts. of oak (78.98), quebracho (73.72), spruce (68.50) and willow (45.64 mv.) indicate the absence of relation to astringency. Purification of the ext. by chem., as well as by physical-chemical methods, leads to a considerable increase of the electrokinetic potential. Spruce tan has a lower equiv. (on the carboxylic group) and a lower buffer capacity, but a higher, though less stable electrokinetic potential than has oak tan. A. A. R.

ASACSLA METALLURGICAL LITERATURE CLASSIFICATION

KOLYAKOVA		B-II-10	
<p>Physical chemistry of tanning. S. I. Sokolov and G. E. Kolyakova. (J. Appl. Chem. Russ., 1935, 8, 1036-1040).—The electrokinetic potential of oak and fir tannins is negative in aq. solutions, and attains a max. val. in dialysed solutions; it falls with increasing [H<sup>+</sup>] to zero at p<sub>H</sub> 1. The tannins behave as weak acids, with a first dissociation const. of 10<sup>-4</sup>, probably relating to CO<sub>2</sub>H groups, and a second of 10<sup>-6</sup> (oak) or 10<sup>-5</sup> (fir), due to phenolic groups. R. T.</p>			
<p>ASR-5LA METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>SEARCHED</p>		<p>INDEXED</p>	
<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>		<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>	

1ST AND 2ND CODES		PROCESS AND PROPERTIES CODES		100 AND 4TH CODES	
CA		Dialysis equipment of coarctated needle: infusions.		17	
<p>1. O. S. Kolyakov. <i>Pharmazyn</i> 6, No. 9, 25-9 (1943).            For max. vitamin C (I) concn. in disintegrating plus needle            ext. (II), dialysis in boiled water for 6, 24, and 30 hrs.,            with parchment bags, was tried with ratio of ext. to water,            acidity, and concn. of I as variables. The natural acidity            (pH 5.8) was varied by acidifying to pH 3.5-3.8. For            best results dialysis should not be prolonged beyond            15-18 hrs. The concn. of I in II increases with rising ini-            tial content of I, with decreasing amt. of dialysis water            and with rising ratio of water to ext. in the dialyzer.            For high yield of I extn. may be on the countercurrent            principle or by double infusion; when a first ext. is used            on a (fresh batch of needles the concn. of I rises from 70-            100 mg.-% (single infusion) to about 150 mg.-%. To            reach 50 mg.-% (corresponding to 1 human dose) of I            100 ml. of bitter ext. (100 mg.-% I) is dialyzed against            200 ml. water. Then 200 ml. of II will contain 1 dose of I            (reduced state) or 1.4 dose (dehydroascorbic acid form).            If the bitter ext. contained 300 mg.-% I then II will            contain 4 doses (reduced state) or 5.6 doses (dehydroas-            corbic acid form). During dialysis the inner and outer            liquids should be agitated every 30-60 min., but for com-            production dialyzers which avoid this necessity should be            used. Acidification to pH 3.5-3.8 makes II stable for about            2 days.</p>					
<p>Julian F. Smith</p>					
<p>ASB-55A METALLURGICAL LITERATURE CLASSIFICATION</p>					
<p>GROUPS: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>					

17

CA

Removal of bitter substances from vitamin-containing extract of tree needles. G. H. Kolpakova. U.S.S.R. 64,587, April 30, 1945. The needle ext. contg. vitamin C is placed within a semipermeable membrane, and the vitamin sepd. by dialysis from the colloidal, bitter substances. M. Huseh

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION



121 AND 122 PROVER										180 AND 179 CRODER									
PROCESSES AND PROPERTIES INDEX																			
CA		<p>Dialysis membranes for Collargol and other medicinals.  <i>G. R. Kolpakova. Farmatsiya 9, No. 2, 26-9 (1946).</i>                      Well-gelatinized dialysis membranes for Collargol, ascorbic acid, and other drugs have a dialysis coeff. higher than that of parchment, Cellophane, or animal membranes. They are made by the tanning action of Cr salts or HCHO on gelatin, deposited on unsized paper, gauze, or cotton fabric. Dialysis rates can be varied by varying the gelatin concn. Membranes from 5% gelatin soln. are permeable to alkali but not to Collargol. The Cr salt is used in amts. up to 10% CrCl<sub>3</sub> equiv. (calcd. on the gelatin). These membranes last 1-2 months. J. F. S.</p>																	
17																			
<p>121 AND 122 PROVER</p> <p>180 AND 179 CRODER</p> <p>121 AND 122 PROVER</p> <p>180 AND 179 CRODER</p>																			

PROPERTIES AND PROPERTIES INDEX	
CA	<p>Determination of the concentration of ethyl alcohol in infusions by measuring their surface tension. G. R. Kolyakova. <i>Zhur. Anal. Khim.</i> 3, 239-41 (1948).—The surface tension (<math>\sigma</math>) as a function of concn. (<math>c</math>) was detd. at 15° for a series of EtOH-H<sub>2</sub>O mixts. in which the EtOH varied from 4 to 95% by vol. in 1% increments and the results were plotted as an isotherm. The effect of medicinal plants on <math>\sigma</math> of their infusions in 30.0 and 50.0% alc. was studied with atropine sulfate, codeine, sapoula, crysimun, eucalyptus oil, cumia oil, and tannin. These substances had no effect on <math>\sigma</math> either singly or together. EtOH concn. was then detd. in a series of official infusions by this method and by the accepted U.S.S.R. Pharm. method. The latter differed by <math>\pm 2.5\%</math>. A comparison was made between <math>\sigma</math> detn. by the Rebinden max. bubble pressure method (C.A. 21, 3507) and the Traube stalagmometer. Up to 40% alc., the difference between the 2 methods was <math>\pm 0.2-0.3</math> erg/sq. cm. As the concn. of alc. increased, the accuracy of the stalagmometer declined. The difference between the results of the bubble pressure method and data given in the literature did not exceed <math>\pm 0.2</math> erg/sq. cm. On the prep. isotherm this is for infusions with 20% alc. <math>\pm 0.3\%</math> for 40% alc. <math>\pm 0.75\%</math> and for 70% alc. <math>\pm 1.1\%</math>. Thus, the accuracy of this method increases as the concn. of alc. decreases. However, at alc. concns. below 10%, the surface activity of the drugs begins to manifest itself. M. Haseh</p>
<p>ASAC-55A METALLURGICAL LITERATURE CLASSIFICATION</p>	

KOLYAKOVA, G. Ye.

"Potentiometric Micromethod for the Determination of Hexachlorocyclohexane on Various Surfaces," by Candidate of Chemical Sciences G. Ye. Kolyakova, Central Scientific Research Laboratory of Water Transport Hygiene and Sanitation, Ministry of Health USSR, Gigiyena i Sanitariya, Moscow, Vol 21, No 12, Dec 56, pp 4-42

The author reports the development of a potentiometric micromethod for the determination of the quantity of isomers of hexachlorane deposited on various surfaces. The method is based on the dehydrochlorination and potentiometric titration of the chemical. The insecticide is removed from the surfaces of objects with cotton tampons moistened with alcohol; it is then extracted from the tampons with alcohol; the alcoholic extract is then treated by heating it with an aqueous solution of a base; a potentiometric titration of the solution is then carried out.

The accuracy of the potentiometric microdetermination was established by placing one milliliter of a solution of the gamma-isomer of hexachlorocyclohexane in alcohol containing 1.5, 5, 7.5, 10, and 20 grams of the chemical per liter, on a glass slide 10 cm<sup>2</sup> in size. Two hours later the chemical was removed from the slide. An analysis produced satisfactory results. The absolute reading of the analysis was  $\pm 0.2$  milligrams. Relative error of the analysis did not exceed 10 percent.

Sum 1258

KOLYAKOVA, G.Ye., kand.khim.nauk

Determination of small amounts of DDT on various surfaces by  
differential potentiometric titration. Gig. i san. 24 no.7:  
72-75 J1 '59. (HIRA 12:9)

1. Iz Tsentral'noy nauchno-issledovatel'skoy laboratorii  
gigiyeny i sanitarii na vodnom transporte.

(DDT, determ.

differential potentiometric titration method  
for determ. of small amounts on various  
surfaces (Rus))

VETLUGINA, K.F.; USMANOVA, A.V.; KOL'YAKOVA, T.A.

Liver abscesses of amebic etiology. Kaz.med. zhur. no.5:68-70  
S-0'63 (MIRA 16:12)

1. Kafedra infektsionnykh bolezney (zav. - dotsent A.P.  
Vozzhayeva) Astrakhanskogo meditsinskogo instituta i Infek-  
tsionnaya bol'nitsa imeni prof. Bekhtereva (glavnyy vrach  
V.I.Gembitskiy) Astrakhan'.

Kolyakova, T. A.

KOLYAKOVA, T.A. (Astrakhan' )

Roentgenologic changes of the soft tissues and bones in brucellosis.  
Klin.med. 35 no.9:144-148 5 '57. (MIRA 10:11)

1. Iz Astrakhanskoy gorodskoy infektsionnoy bol'nitsy imeni prof.  
Bekhtereva (glavnyy vrach - zasluzhennyy vrach RSFSR V.I.Gembitskiy)  
(BRUGELLOSIS, manifest.  
x-ray changes of bones & soft tissues)  
(BONE AND BONES, in various dis.  
x-ray changes in brucellosis)

KOLYAND, M. M.

KOLYAND, M. M. - "Complex Method of Determining the Thermal Physical Characteristic of Thermal-Insulation Materials at Low Temperatures." Min of Higher Education USSR, Leningrad Technological Inst of Refrigeration Industry, Leningrad, 1955 (Dissertations For Degree of Candidate of Technical Sciences)

30: Knizhnaya Letopis' No. 26, June 1955, Moscow

9.3240 (1067, 1143, 1154)

86139  
S/112/59/000/012/084/097  
AO52/A001

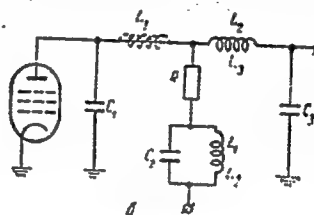
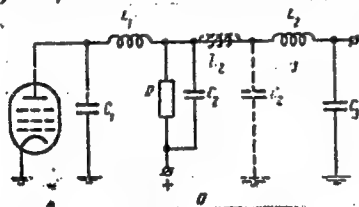
Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 12, p. 253, #25684

AUTHORS: Gippius, A.A., Kolyan, V.P.

TITLE: On Broadband Correction Circuits of Amplifiers

PERIODICAL: Sb. statey nauch. stud. o-va Mosk. energ. in-ta, 1956, No. 9, pp. 77-85

TEXT: Correction circuits in the h-f region described by differential equations of V and VI order are built on the base of spurious capacitances of the circuit, whereby the circuit of V order is built on three or two partial capacitances (see drawing 1a, 1b) and in circuits of VI order correcting inductances are added



Card 1/2



86139

S/112/59/000/012/084/097  
A052/A001

On Broadband Correction Circuits of Amplifiers

(see drawing 1a and 1b - dotted line). Circuits of higher orders give broader frequency characteristics with a number of extrema being less by one than the degree of the differential equation, i.e. the circuit of V order gives a gain on pass band (or by amplification at a constant band) of 2.3 times and the circuit of VI order by 2.75 times as compared with the most known circuit of II order. The variant with two capacitances  $C_1$  and  $C_3$  can give a broad pass band. The variant with three capacitances is appropriate in the case when  $C_2$  is formed by spurious capacitances of the circuit, for instance when a stage works on a tube through a cable (at  $C_{cab} \leq C_2$ ). When the circuit works as an interstage one (tubes 6Ж3П -6Zh3P) at  $C = 14$  picofarads in 5.5 Megacycles band, an amplification of 29.5 is obtained, and when the circuit works in the output stage (tube 6П9 -6P9) at  $C = 27$  picofarads in the same band, an amplification of 25.8 is obtained. Frequency phase characteristics of circuits of I-VI orders and transient characteristics of circuits of V order are given.

V.I.A.

Translator's note: This is the full translation of the original Russian abstract.

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Card 2/2

1ST AND 2ND COLUMNS		PROCESSING AND PROPERTY INDEX	
<p><i>Ca</i></p> <p>The selection of mixtures for the Leningrad coke-gas plant. L. Ya. Kolyanda. <i>Coke and Chem</i> (U.S.S.R.) 1939, No. 1, 13-16; <i>Khim. Referat. Zhur</i> 1939, No. 8, 94.---Exptl. coking with a higher content of lean coals in summer and with rich coals in winter is reported. The mixts. contained 13-28% of lean coals, 10-35% of gas coals, 20-23% of intermediate coals and 33-36% of rich coals. Four lean mixts. contg. volatile substances (V) 22.5-23.1% and moisture (W) 5.0-6.4% were coked for 17.5-18.5 hrs. The temp. conditions were not normal (1338-1352° on the coking side) and the walls of the chambers were overheated. Six rich mixts. (V = 27.0-28.0% and W = 4.5-7.0%) were coked for 14.0 hrs. (1350-1340° on the coking side) with a slight underheating of the upper part of the furnace. The content of NH<sub>3</sub> in the gas in all mixts. remained within the usual limits (0.8 g./cu. m.). Lean mixts. yielded very little ammoniacal liquor; rich mixts. yielded much. All rich mixts. produced an increased yield of gas (340-50 cu. m.) approx. 20-30 cu. m. more than the usual mixts. The calorific value was 4500 instead of 4000-4100. A considerably larger amt. of unsatd. hydrocarbons and CH<sub>4</sub> was obtained. The yield of benzene increased by 0.2-0.3% and that of tar by 0.6-1.0% of the mixt. Lean mixts. yielded 0.2-0.6% less tar, 0.1-0.25% less benzene and 5-20 cu. m. less gas. Addn. of even small amts. of lean coals to the mixt. decreased sharply the yield of benzene. Coke produced from rich mixts. possessed an increased longitudinal cleavage.</p> <p>W. R. Henn</p>		<p>21</p>	
<p>ASR-51A METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>13000 11010110</p>		<p>1300 804100</p>	
<p>13000 11010110</p>		<p>1300 804100</p>	

PROCESSES AND PROPERTIES INDEX

3

5

The Quality of Foundry Coke. L. Ya. Kolyandr. (Kola i Khimiya, 1940, No. 2, pp. 12-16). (In Russian). Published information on the effect of the quality of foundry coke is reviewed and experimental results obtained with a 2.81-cu. m. cupola (with a designed output 4 tons per hr.) are discussed. Attempts were made to relate various properties of the coke to the output, to the mean temperature of the metal and to the coke consumption per ton of metal in the cupola. It was found that the drum test figure was not conclusive. While a low figure is undesirable, it does not follow that the higher the figure the more suitable is the coke as a fuel for the cupola. Determination of the reaction capacity of a finely ground sample does not give characteristic results. More informative results could probably be obtained by determining the burning capacity of large pieces of coke in amounts of 25-50 kg. In connection with such determinations, as well as with the behaviour of the coke as a fuel in the cupola, the screen analysis of the coke is of the greatest importance. The 0-40 mm. fraction should be a minimum.

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ASM-AIA METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

OFFICIAL USE ONLY

KOLYANDR, L.Y.		PROCESSES AND PROPERTIES SUCH AS					
BCL		212					
<p>The following paper by L. Y. Kolyandr (Zhuk. i Khim., 1940, No. 1, p. 58) reports on the catalytic oxidation of <math>C_2H_4</math> in <math>H_2O</math>, <math>H_2O_2</math>, and in coke-oven gas to which air has been added, were carried out with <math>Ni</math>, <math>Ni-Fe</math>, and <math>Ni-Pb</math> catalysts. The last-named proved to be the most efficient. Oxidation is accompanied by formation of <math>H_2S</math>. There was an increase in the <math>CO_2</math>, a decrease in the <math>H_2</math>, and a slight decrease in the <math>CO</math> contents of the gas. The amount of unsaturated compounds in the <math>C_2H_4</math> was reduced. The <math>(NH_4)_2SO_4</math>-<math>NH_4H_2PO_4</math> solutions used absorb the <math>SO_2</math> and <math>NH_3</math> from the gas rapidly, and measurements of the <math>SO_2</math> and <math>NH_3</math> pressures over such solutions showed that absorption efficiency will be high for <math>SO_2/NH_3</math> mol. ratios of 0.4-0.6. Only a small vol. of absorbent is required. The excess of absorbent is converted into a solution of <math>(NH_4)_2SO_4</math> and <math>S</math> by heating to <math>140^\circ</math> in an autoclave. The <math>SO_2/NH_3</math> ratio in the original solution must be <math>&lt;0.75</math> for the reaction to begin.</p>							
A. H.							
ASB-55A DETAILING LITERATURE CLASSIFICATION							
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COMMON ELEMENTS		PROCEDURES AND PROPERTIES INDEX		COMMON VARIANTS INDEX	
<p>18</p> <p>Production of ammonium sulfate without the use of sulfuric acid. L. Koltrands. <i>Novosti Tekhniki</i> 1940, Nos. 13-14, 44-5. The process consists of the selective oxidation of H<sub>2</sub>S in coke-oven gas to SO<sub>2</sub>, followed by absorption of SO<sub>2</sub> and NH<sub>3</sub> in solns. of ammonium sulfite and bisulfite and treatment of these solns. to obtain S and (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>. Expts. were made with synthetic mixts. contg. (1) H<sub>2</sub>S 1, O<sub>2</sub> 2, H<sub>2</sub> 0.7, N<sub>2</sub> 30%, (2) H<sub>2</sub>S 1, O<sub>2</sub> 3, H<sub>2</sub> 62.3, N<sub>2</sub> 33.2%, (3) H<sub>2</sub>S 0.5, O<sub>2</sub> 2.0, H<sub>2</sub> 67.0, N<sub>2</sub> 30.5%. Catalysts were Ni, Ni-Mo, Ni-Bi, Ni-Pb on pumice and also activated charcoal. Gas vol. rates were 5000 to 10,000. H<sub>2</sub>S could be oxidized to a high degree in a reducing atm. Increase in O<sub>2</sub> content of gas or a decrease in gas vol. rate from 10,000 to 5000 had very little effect on oxidation. Oxidation was reduced by making the gas wet and by using a vol. rate of 10,000 in all cases, except for activated charcoal. At a rate of 5000 the oxidation was not affected by moisture. In using actual coke-oven gas, the results were quite different. Ni catalyst was rapidly poisoned, while activated charcoal gave an oxidation of 40%, compared with 85-95% for synthetic gas mixts. By removing the C<sub>2</sub>H<sub>4</sub> hydrocarbons, the oxidation was increased to 90%. Ni-Mo and Ni-Pb catalysts showed good results, even after several days use, giving 85-87% oxidation. The SO<sub>2</sub> and NH<sub>3</sub> were extd. from the gas by using solns. contg. 113.0, 124.5, 148.0 g./l. of SO<sub>2</sub> and 50.2, 49.7, 46.13 g./l. of NH<sub>3</sub>. Extn. was at 30°. The solns. were acidified and heated to 130-140°; they give the following: 3NH<sub>4</sub>HSO<sub>4</sub> → (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> + NH<sub>4</sub>HSO<sub>4</sub> + S + H<sub>2</sub>O; (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> + 2NH<sub>4</sub>HSO<sub>4</sub> → 2(NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> + 2S + H<sub>2</sub>O. Expts. are to be carried out on a plant scale. R. Z. Kamich 19</p>		<p>ASA-CLA METALLURGICAL LITERATURE CLA</p>		<p>RESEARCH DIVISION</p>	

KOLYANDR, L. YA.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 432 - I

BOOK

Call No.: TP953.K57

Author: KOLYANDR, L. YA.

Full Title: RECOVERY AND TREATMENT OF CHEMICALS PRODUCED BY COKING

Transliterated Title: Ulavlivaniye i pererabotka khimicheskikh  
produktov koksovaniya

Publishing Data

Originating Agency: None

Publishing House: State Scientific and Technical Publishing House of  
Literature on Ferrous and Nonferrous Metallurgy

Date: 1953

No. pp.: 415

No. of copies: 3,500

Editorial Staff: None

Text Data

Coverage: The book deals with the technological procedures of coking and with the design of the most important equipment. The physico-chemical principles underlying the processes and their relation to the design of the equipment are discussed. Improvement in methods of production, quality of the product, production control and safety technique are discussed. The table of contents listed below indicates the scope and purpose of the book. Numerous diagrams and tables are included. Contributions of Russian scientists are emphasized. The bibliography consists of Russian references only.

Ulavlivaniye i pererabotka khimicheskikh  
produktov koksovaniya

AID 432 - I

It seems to be an adequate textbook for student metallurgists.

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Ulavlivaniye i pererabotka khimicheskikh  
produktov koksovaniya

AID 432 - I

Purpose: This is a textbook designed to be used in technicums of the  
Ministry of the Metallurgical Industry.

Facilities: Some plants are mentioned

No. of Russian and Slavic References: 16 (after 1939)

Available: Library of Congress.

3/3

KOLYANDR, L.Ya.; GRINBERG, A.M.; KOLTUN, R.M.; ZASLAVSKAYA, T.I.

Determination of constants of pure o-xylene and the development of indexes for characterization of commercial product. Zhur. Priklad. Khim. 26,438-42 '53. (MLRA 6:4)  
(CA 47 no.19:9703 '53)

1. Kharkov Coke-Chem. Plant.



KOLYANDR, L.Ya.

VODNEV, G.G.; SHELKOV, A.K.; DIDENKO, V.Ye.; FILIPPOV, B.S.; TSAREV, M.H.;  
 ZASHVARA, V.G.; LITVINENKO, M.S.; MEDVEDEV, K.P.; MOLODTSOV, I.G.;  
 LGALOV, K.I.; RUBIN, P.G.; SAPOZHNIKOV, L.M.; TYUTYUNNIKOV, G.N.;  
 DMITRIYEV, M.M.; LEYFES, V.A.; LERNER, B.Z.; MEDVEDEV, S.M.; REVIKIN,  
 A.A.; TAYCHER, M.M.; TSOGLIN, M.E.; DVORIN, S.S.; RAK, A.I.; OBUKHOV-  
 SKIY, Ya.M.; KOTKIN, A.M.; ARONOV, S.G.; VOLOSHIN, A.I.; VIROZUB, Ye.V.;  
 SHVARTS, S.A.; GINSBURG, Ye.Ye.; KOLYANDR, L.Ya.; BELETSKAYA, A.F.;  
 KUSHNAREVICH, N.R.; BRODOVICH, A.I.; NOSALEVICH, I.M.; SHTROMBERG, B.I.;  
 MIROSHNICHENKO, A.M.; KOPELIOVICH, V.M.; TOPORKOV, V.Ya.; AFONIN, K.B.;  
 GOFTMAN, M.V.; SEMENENKO, D.P.; IVANOV, Ye.B.; PEYSAKHZON, I.B.;  
 KULAKOV, N.K.; IZRAELIT, E.M.; KVASHA, A.S.; KAPTAN, S.I.; CHERMNYKH,  
 M.S.; SHAPIRO, A.I.; KHALABUZAR', G.S.; SEKT, P.Ye.; GABAY, L.I.;  
 SMUL'SON, A.S.

Boris Iosifovich Kustov; obituary. Koks i khim. no.2:64 '55.(MLBA 9:3)  
 (Kustov, Boris Iosifovich, 1910-1955)

KOLYANDR, L.Ya.

68-9-10/15

AUTHOR: Kolyandr, L.Ya.

TITLE: On the Problem of Continuous Washing of Benzene with Sulphuric Acid. (K voprosu o nepreryvnoy sernokislotoy ochestke benzola)

PERIODICAL: Koks i Khimiya, 1957, Nr 9, pp.47-51 (USSR)

ABSTRACT: Kinetics of purifying benzene by washing with sulphuric acid are discussed. Results of continuous washing of benzene-toluene-xylene fractions in ball mixers, carried out on the Enakiyevsk Coke Oven Works, are analysed. Kinetics of the process were investigated under laboratory conditions, namely: the influence of the temperature and the time of contact on the yield of acid tar and bromine number of the purified product were studied. Results obtained are given in Table 1 and Fig.2. On the Dnepropetrovsk Coke Oven Works experimental continuous washings were carried out in a dispersion mixer (Fig.3) obtained from the Petroleum Industry (the apparatus was designed and manufactured by UKhIN). The main data on fractions tested and the results obtained are given in Table 2. The duration of contact between the acid and benzene varied from 35 to 52 sec. On the basis of the results obtained it is concluded that the efficiency of stirring is the main factor

Card 1/2

'On the Problem of Continuous Washing of Benzene with Sulphuric Acid.

determining the necessary duration of the washing process, the amount of the acid tar formed, the consumption of sulphuric acid and the degree of purification of the fraction washed. A successful sulphuric acid wash requires a maximum stirring efficiency and a very short time of contact. The dispersion mixer tested satisfied the above conditions and its industrial testing is recommended. There are 2 tables, 3 figures and 9 references, including 7 Slavic.

ASSOCIATION: UKhIN.

AVAILABLE: Library of Congress.

Card 2/2

68-58-2-10/21

AUTHORS: Kolyandr, L.Ya., Orlov, M.L., Tyaptina, M.I. and  
Fomenko, G.M.

TITLE: Production of High-quality Benzole for Organic Synthesis  
(Polucheniye vysokokachestvennogo benzola dlya  
organicheskogo sinteza)

PERIODICAL: Koks i Khimiya, 1958, Nr 2, pp 44 - 46 (USSR)

ABSTRACT: A new standard for benzole for synthesis I, introduced in September, 1957, required a very low concentration of thiophene (0.005%). An investigation was carried out in order to study the process of purification of benzole-toluole fraction up to the limits required for the benzole synthesis I and to develop the optimum scheme for the production of such benzole. The investigation of the appropriate fractions from Zaporozhe and Bagleysk Coke Oven Works (Table 1) under laboratory conditions was carried out. At first, a direct washing of the whole fractions was tested (Table 2); the results obtained indicated that this method of purification is unprofitable. Therefore, the following investigations were carried out: 1) Separation of BTX (mixed) fraction into a narrow benzole fraction and a toluole-xylol fraction with their subsequent treatment to a required purity; 2) The usual washing of mixed fraction to limits required to obtain pure products

Card1/2

68-58-2-10/21

Production of High-quality Benzole for Organic Synthesis

(bromine numbers benzole  $\leq 0.6$ ; toluole  $\leq 0.3$ ) with subsequent washing of pure benzole to the required standard. Experimental results are given in Tables 3-5. It is concluded that for Southern works, the second scheme is most suitable, but for Eastern works, which deal with low-sulphur products, the first scheme may be more rational. It is pointed out that both methods of production of benzole for synthesis are imperfect and that further research is necessary. There are 5 tables and 6 references, 2 of which are Soviet, 2 English, 1 French and 1 German.

ASSOCIATION: UKhIN

AVAILABLE: Library of Congress

Card 2/2

1. Benzole - Production
2. Benzole - Purification
3. Benzole - Synthesis

SOV/68-58-11-13/25

AUTHORS: Kolyandr L.A., Tyaptina M.I., and Fomenko G.M.

TITLE: The Composition of Crude Benzole (Sostav Syrogo Benzola)

PERIODICAL: Koks i Khimiya, 1958, Nr 11, pp 38-42 (USSR)

ABSTRACT: Chemical composition of crude benzole is discussed taking as an example of crude benzoles obtained by coking of Donets coals. The influence of coking temperature within ranges 950, 1000-1050 and 1050-1100°C on the composition of crude benzole is given in Table 1, typical composition of raw benzole in Table 2, the distribution of unsaturated hydrocarbons between the individual benzole fractions in Table 3, and its dependence on coking temperature in Table 4; the types of sulphur compounds and their distribution between various benzole fractions in Tables 5-7, the distribution of saturated compounds between various benzole fractions in Table 8 and their

Card 1/2

PHASE I BOOK EXPLOITATION

SOV/4656

Kolyandr, Lev Yakovlevich

Pererabotka syrogo benzola (Refining of Raw Benzene) Khar'kov, Metallurgizdat, 1960. 319 p. Errata slip inserted. 1,950 copies printed.

Resp. Ed.: E. I. Foss; Ed. of Publishing House: S. S. Liberman; Tech. Ed.: S. P. Andreyev.

**PURPOSE:** This book is intended for engineers and technicians of by-product coking and chemical plants, for research engineers, and students of higher schools of chemical technology.

**COVERAGE:** The book reviews the present state of the technology of refining raw benzene and discusses the physicochemical principles upon which the flow sheets and refining processes are based. Equipment design and operating conditions, and ways of intensifying and automating refining processes are considered. Possibilities of malfunctions during the refining process and their elimination are analyzed. Data on the percentage composition and physical constants of principal raw benzene components are reviewed and tabulated in Chapter I. No personalities are mentioned. There are 236 references, mostly Soviet.

Card 1/4

KOLYANDR, L. Ya.; TYAPTINA, M.I., FOMENKO, G.M.

Impurities in pure benzene. Koks i khim. no.3:42-47 '60.  
(MIRA 13:6)

1. Ukrainskiy uglekhimicheskiy institut.  
(Benzene)

S/068-x/60/000/008/001/003  
E071/E435

AUTHORS: Kolyandr, L.Ya., Tyaptina, M.I. and Fomenko, G.M.

TITLE: The Composition and Yield of Xylol, a By-Product of  
the Coal Carbonization Process

PERIODICAL: Koks i khimiya, 1960, No.8, pp.41-44

TEXT: The composition of technical xylol, a by-product of the coal carbonization process, was little investigated, mainly due to lack of reliable methods and the lack of demand for the individual isomers. In the paper, the yield and composition of xylol produced on 9 coking works was investigated using mean dynamic samples for the fourth quarter of 1957. In addition to xylol fraction a part of xylol remains in heavy benzole and solvent naphtha; it was therefore necessary to determine the content of xylol in the above two products (Table 1). The determination of the xylol content was done by careful rectification using a column equivalent to 30 theoretical plates at reflux ratio of 5-6, whereupon the fraction boiling at 135.0 to 144.5°C was considered as xylol. The distribution of xylol between the individual products was found to be as follows: 78.8% pure xylol fraction

Card 1/3



S/068-x/60/000/008/001/003  
E071/E435

The Composition and Yield of Xylole, a By-Product of the Coal Carbonization Process

(GOST 10465-39), 13.1% solvent naphtha (GOST 1923-50) and 8.1% heavy benzole. The content of the individual isomers in technical xylole as well as in xylole separated from solvent naphtha and heavy benzole was determined by the spectrophotometric method. In addition, paraxylole was determined cryoscopically and methaxylole was determined by the usual method through trinitromethaxylole. Non-aromatic admixtures (paraffins and naphthenes) were determined spectrophotometrically (the difference between 100 and the sum of determined aromatics) and by the usual method; sulphonation with 98% sulphuric acid (at 20° for 20 min). The content of toluol was determined by rectification. The composition of xyloles from the individual works was found to be similar and is given in Table 2. On the average, the composition of technical xylole was as follows, in %: ethylbenzene 4.8; paraxylylene 21.1; methaxylylene 58.0; orthoxylylene 13.5; toluene 1.3; non-aromatic and other admixtures 1.3. The composition of xyloles separated from solvent naphtha and heavy benzole was, on average, as follows: 3.6% ethylbenzene;

Card 2/3

S/068-x/60/000/008/001/003  
E071/E435

The Composition and Yield of Xylol, a By-Product of the Coal Carbonization Process

16.5% paraxylene; 48.5% methaxylene; 28.5% orthoxylene;  
2.9% unsaturated and other admixtures (for individual work see  
Table 3). The average overall composition of xylol was:  
4.5% ethylbenzene; 20.1% paraxylene; 56% methaxylene;  
17% orthoxylene; 2.4% unsaturated and other admixtures; it  
differs from the equilibrium composition (given in Table 4).  
The following yield of the individual isomers was obtained from  
raw benzole (mean sample for the fourth quarter 1957):  
0.23% ethylbenzene; 0.97% paraxylene; 2.70% methaxylene;  
0.82% orthoxylene. There are 4 tables and 5 references;  
3 Soviet, 1 English and 1 German.

ASSOCIATION: UKhIN

Card 3/3

S/068/60/000/003/002/003  
E071/E233

AUTHORS: Kolyandr, L. Ya., Tyaptina, M. I., and Fomenko, G.M.

TITLE: Impurities in Pure Benzole

PERIODICAL: Koks i khimiya, 1960, No. 3, pp. 42-47

TEXT: The nature of impurities present in pure benzole and sensitivity of methods of their determination are discussed in the light of the author's own and literature data. The sensitivity of methods of determination of the individual sulphurous compounds was tested by using samples of pure benzene with addition of known proportion of the corresponding sulphur compounds (thiophene - Table 1; elemental sulphur - Table 2; mercaptans - Table 3). It is concluded that the sensitivity of methods of determining the individual sulphur compounds as percent of sulphur is as follows: Thiophene (isatin tests) down to 0.00005% elemental sulphur (copper strip) - down to 0.0005%; mercaptans (doctor's test) - down to 0.0002; carbon disulphide (reaction with diethylamine) - down to 0.0001%. The main impurities in pure benzole are hydrocarbons of paraffin and cycloparaffin series, n-heptane, cyclohexane, dimethylpentanes and methyl cyclopentane (Table 4). The

Card 1/2

S/068/60/000/003/002/003  
E071/E233

### Impurities in Pure Benzole

determination of non-aromatic impurities can be done cryoscopically using the following formula:  $x = 1.80 \cdot \Delta t$ , where  $x$  - content of non-aromatic hydrocarbons in wt.%, and  $\Delta t$  - temperature depression. The accuracy of the equation in which the mean molecular weight of non-aromatic impurities was taken as 92 is sufficient for the purpose (Table 5). On careful rectification non-aromatic compounds are concentrated in the head and final fractions (Table 6) and by combining various fractions the quality of the pure benzole can be controlled (Table 7). The influence of the toluene content on the boiling range of benzole is shown in Table 8. By limiting the boiling range of benzene to 0.5-0.6°C, the content of toluene below 0.1% can be guaranteed. The content of nitriles in various pure benzoles expressed in mg of ammonia per litre (Table 9) varies from 5-10 mg/l. In the content of naphthalene in pure benzole on average about 0.01%. The synthesis grade of benzole obtained by redistillation the naphthalene content should not exceed 0.001%. There are 9 tables and 18 references: 5 Soviet and 13 non-Soviet.

ASSOCIATION: UKhIN  
Card 2/2